

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A process for the production of electrical steel sheet cores for use in electrical equipment comprising the following steps

- a) applying of at least one coating layer of an aqueous composition onto the surface of the electrical steel sheet, the composition comprising
 - A) 100 parts per weight of one or more epoxy resins based on bisphenol-A-type, 100% of solids,
 - B) 1 to 25 parts per weight of dicyandiamide,
 - C) 0.1 to 10 parts per weight of additives,
 - D) 0.1 to 120 parts per weight of flow agent and
 - E) 50 to 200 parts per weight of water,
- b) drying the applied layer under increased temperature and
- c) assembling of the a coated electrical steel sheets obtained in step b) with at least one additional electrical steel sheet to form a sheet core and bonding the sheets with each other by thermal curing of the coating.

Claim 2 (currently amended): The process according to claim 1 wherein the composition is produced by production of an epoxy dispersion by mixing the epoxy resin with water and then adding ~~the dicyandiamide and the further components B) – E) of the composition.~~

Claim 3 (original): The process according to claim 2 wherein the epoxy resin is used in a quantity of 40 to 70 wt.% in the aqueous dispersion.

Claim 4 (currently amended): The process according to claim 1 wherein water is added in a quantity such that a solids content of 30 to 60% is obtained for the finished composition of step a).

Claim 5 (original): The process according to claim 1 wherein the number average molar mass of the epoxy resin is from about 700 to 5000, the epoxy equivalent weight from about 400 to 6000.

Claim 6 (original): The process according to claim 1 wherein micronized dicyandiamide is used with an average particle size of no greater than 6 μm .

Claim 7 (original): The process according to claim 1 wherein polyglycol is used as a flow agent in a quantity of 2 to 70 parts per weight.

Claim 8 (original): The process according to claim 1 wherein one or more monomeric organo-metallic compounds selected from the group consisting of ortho-titanic and -zirconic acid esters are additionally used in the composition.

Claim 9 (original): The process according to claim 1 wherein the composition is applied onto the untreated and uncoated electrical steel sheet as one-layer-coating with a layer thickness of 3 to 8 μm .

Claim 10 (original): The process according to claim 1 wherein the drying of the coating is effected at temperatures causing a PMT in the range of 230 to 260°C.

Claim 11 (original): The process according to claim 1 wherein the bonding and curing of the coating is effected at temperatures from 100 to 300°C and at a pressure of 1.0 to 6.0 N/mm^2 during a fixed time period.

Claim 12 (withdrawn): An electrical steel sheets core for use in electrical equipment produced by the process according to claim 1.